Injuries can occur anywhere and at any time, but the most prevalent place of occurrence is in the workplace. The reason for such a high rate of injury is that people spend 8-18 hours a day, 5-7 days a week performing unidirectional (one-way) movement patterns, causing an imbalance in the musculoskeletal system that results in the overuse and under use of certain muscle groups. If left unchecked, these injuries can be become chronic, resulting in pain and dysfunction that can last for years.

Usually, when one muscle group is overused, the opposing muscle group, acting as a stabilizer, becomes underused. When this imbalance establishes itself in the musculoskeletal system, the body does not function as designed. Instead of muscles working together to perform a specified function, they work against each other, causing the body to exert more energy to perform the same task that previously was perceived by the body as “simple”.

When muscles become too short and tight, they lose their strength as they are in a chronic semi-contracted state and cannot contract (shorten) efficiently due to being pre-fatigued and the fact that they are already in a state where they are too short for proper function. If a muscle is already in a shortened, semi-contracted state, it cannot contract, or shorten very far. And the farther a muscle can contract (shorten) and move, the greater the strength and endurance the muscle will have. Chronically tight, restrictive muscles just don’t function very well and they impinge structures around and beneath them such as nerves and blood vessels, causing disorders like Carpal Tunnel Syndrome, Cubital Tunnel Syndrome and many other associated Repetitive Strain injuries. Short muscles also pull bones out of alignment, which causes joint imbalance, often resulting in severe pain and dysfunction.

The same goes for underused muscles. Underdeveloped muscles are weak due to lack of direct stimulation. Weak muscles are usually too long, unless they are in a state of spasm, which occurs as a protective response in order to keep from being overstretched. Weak underdeveloped muscles cannot act as efficient stabilizers when the opposing muscle(s) are called into action, which again causes a joint imbalance to develop, as weak muscles cannot stabilize bones in their proper position / alignment. Whether a muscle is short and tight or long and weak, the strength and length imbalance of the affected muscle(s) must be corrected for the body to function optimally without pain, dysfunction and reduced mobility of the involved muscles / joints.

Muscle imbalances are the cause of most biomechanical disorders in the body. From Carpal Tunnel Syndrome to Thoracic Outlet Syndrome, an existing muscle imbalance is at the root cause of the disorder in 90% of the cases. Too many modalities focus on the “Band-Aid principal”, allowing the muscle imbalance go on for years with a little bit of relief here and there. Now is the time to focus on the actual “cause(s)” of these disorders and eliminate them altogether. With the appropriate exercise and stretch routine, most musculoskeletal disorders can be eliminated quickly and effectively.

Correcting muscle imbalances is achieved through a process consisting of a number of stretches and exercises. Soft-tissue treatment and hot/cold therapy may be utilized to help expedite the rate of recovery if it is so desired. Usually the nature of performing both stretches and exercises within the same program can be quite effective at eliminating the existing condition without the addition of the soft tissue treatment and hydrotherapy. Word of caution; there is a treatment sequence to addressing muscle imbalances if the best results are to be achieved. If random stretches and exercises are performed, an individual may cause themselves more harm than good.

A general rule when addressing a chronic muscle imbalance is to execute the following program:

**1. Heat Therapy\*:** Use heating-pad 5 Min. to warm the affected joint and surrounding muscles, preparing them for upcoming stretches and exercises. (Be sure that all sides of the joint and surrounding muscles are warmed-up.)

**2. Soft-Tissue Treatment\*:** Soft tissue treatment utilizing Effleurage and Trigger Point Therapy to reduce muscle spasm and relax the tight, restrictive overused muscles can be very effective in correcting muscle imbalances. (Utilizing Transverse Friction Massage (TFM) on specifically weak, injured muscles and/or tendons to break down adhesions on the soft tissues can also be very effective in reducing overall pain and dysfunction.) Performing basic massage to the tight muscles is the easiest way to address the issue without getting too complex.)

**3. Stretching Routine:** Once the muscles are warmed up, stretching the tight, restrictive muscle group is key to increasing their length and reducing their impingement of surrounding tissues as well as reducing their effect on the misalignment of the joint. (Stretching the weak, underdeveloped muscles is not recommended as they are already too long and do not need to be lengthened further.)

**4. Exercise Routine:** Once the tight restrictive muscles have been lengthened from the stretches, it is time to exercise the opposing muscle group, the one that is weak and underdeveloped, in order to shorten and strengthen the muscles in order to reduce the tensile stresses imposed on them from the opposing tight muscle group. Exercising and strengthening the weak underdeveloped muscles not only forces the opposing muscle group to relax and lengthen further, but it also helps to maintain the length created in those muscles from the previous stretches. (Do not perform stretches after the exercises as this misaligns the joints and causes muscle rebounding. Always perform stretches first when addressing chronic muscle imbalances and then immediately follow with exercises.)

**5. Contrast Bath\*:** Utilizing a contrast bath at the end of the complete routine can be helpful in reducing muscle spasm, remove toxins from the muscles and increase circulation and overall nutrient flow to the injury, helping to aid an increase the speed of recovery. Basic procedure is 3-minutes heat to 1-minute of cold. Repeat 3-times, finishing with cold.

\*Optional Part of Treatment

This general treatment program for chronic repetitive strain injuries resulting from muscle imbalances is very effective and often eliminates all of the symptoms previously associated with the injury, quickly and effectively. Always consult a physician before beginning any type of exercise or treatment program.

Remember, Your Health is in Your Hands!

For those suffering from acute or chronic back pain, I urge you to read this article over exercises and techniques for long lasting relief. Click [here](https://www.healthost.com/blog/view/191722/overcoming-chronic-back-pain)